

Amendments to the Claims

Please amend claim 30 as shown in the listing of the claims.

This listing of claims will replace all prior versions and listing of claims in the application.

Listing of Claims

1. (Previously Presented) An apparatus for fabricating oriented polymer fibers, the apparatus comprising:
 - (a) a dispenser for containing an electrically charged metastable polymer dispersion, the dispenser including a proximal end and a distal end, where the proximal end defines an orifice;
 - (b) an electrode positioned near the proximal end of the dispenser defining the orifice, wherein the electrode and the proximal end of the dispenser defining the orifice define a gap there between, wherein the gap between the proximal end of the dispenser defining the orifice and the electrode is between about 1 millimeter and about 10 millimeters; and
 - (c) a collector for receiving the oriented polymer fibers, wherein the collector is separated from the gap.
2. (Original) The apparatus of claim 1, wherein the dispenser is connected to a source of electric potential for charging the polymer dispersion.
3. (Original) The apparatus of claim 2, wherein the source of potential is a direct current battery.
4. (Original) The apparatus of claim 1, wherein the polymer dispersion comprises a polymer and a liquid phase.

5. (Original) The apparatus of claim 4, wherein the polymer is selected from a group consisting of poly(vinylidene fluoride-co-trifluoroethylene) and poly(lactic acid-co-glycolic acid).
6. (Original) The apparatus of claim 4, wherein the polymer dispersion further includes doping ions.
7. (Original) The apparatus of claim 4, wherein the polymer dispersion further includes a surfactant.
8. (Original) The apparatus of claim 4, wherein the polymer dispersion further includes a biological molecule.
9. (Original) The apparatus of claim 4, wherein the polymer dispersion further includes a compound decreasing the stability of the metastable polymer dispersion.
10. (Original) The apparatus of claim 9, wherein the compound decreasing the stability of the metastable polymer dispersion is sodium chloride.
11. (Original) The apparatus of claim 1, wherein the collector is grounded.
12. (Original) The apparatus of claim 1, wherein the dispenser is fabricated of glass.
13. (Original) The apparatus of claim 1, wherein the orifice is a capillary tip.
14. (Original) The apparatus of claim 1, wherein the orifice has a diameter between about 10 nanometers and 100 micrometers.
15. (Previously Presented) A method for fabricating oriented polymer fibers, the method comprising:
 - (a) positioning an electrode near a dispenser containing a metastable electrically charged polymer dispersion, the dispenser including a proximal end and a distal end, wherein the proximal end defines an orifice, and wherein the electrode is positioned near the proximal

end of the dispenser defining the orifice to form a gap there between, and wherein the gap between the proximal end of the dispenser defining the orifice and the electrode is between about 1 millimeter and about 10 millimeters;

(b) electrically pulling the polymer dispersion from the orifice by applying electric voltage to the electrode, wherein the electric voltage applied to the electrode is between about 20 kV and 40 kV; and

(c) collecting the oriented polymer fibers at a collector separated from the gap, and allowing the electropulled dispersion to solidify to form the oriented polymer fibers.

16. (Original) The method of claim 15, wherein the dispenser is connected to a source of electric potential for charging the polymer dispersion.
17. (Original) The method of claim 16, wherein the source of electric potential is a direct current battery.
18. (Original) The method of claim 15, wherein the metastable polymer dispersion comprises at least one polymer and a liquid phase.
19. (Previously Presented) The method of claim 18, wherein the liquid phase comprises a plurality of liquids.
20. (Original) The method of claim 18, wherein the metastable dispersion is fabricated by dispersing a polymer in the liquid phase.
21. (Original) The method of claim 18, wherein the metastable dispersion is fabricated by dissolving a polymer in a solvent to make a polymer solution, and dispersing the polymer solution in the liquid phase.
22. (Previously Presented) The method of claim 18, wherein the polymer is selected from a group consisting of poly(vinylidene fluoride-co-trifluoroethylene) and poly(lactic acid-co-glycolic acid).

23. (Original) The method of claim 18, wherein the metastable dispersion further comprises a compound for decreasing the stability of the metastable polymer dispersion.
24. (Original) The apparatus of claim 23, wherein the compound decreasing the stability of the metastable polymer dispersion is sodium chloride.
25. (Original) The method of claim 18, wherein the metastable dispersion further comprises biologically active molecules.
26. (Original) The method of claim 18, wherein the metastable dispersion further comprises at least one surfactant.
27. (Original) The method of claim 15, wherein the collector is grounded.
28. (Original) The method of claim 15, wherein the orifice is a capillary tip.
29. (Previously Presented) The method of claim 15, wherein the orifice has a diameter between about 10 nanometers and 100 micrometers.
30. (Currently Amended) The method of claim 15, wherein the electric voltage applied to the electrode is ~~between~~ about 30 kV.
31. (Previously Presented) The method of claim 15, wherein the gap and the collector are separated by between about 10 centimeters and 30 centimeters.